

California and have become an important part of local strategies in the CCPCUA area.

Water efficiency/Loss detection and prevention

Water leaks and poor metering can lead to very significant water losses. A thorough water audit would quantify the volume of water as it flows from source intakes through the points of consumption, identifying water losses through leaks. Water leaks through the distribution network can sometimes amount to 30% or more of the total water treated and put into the distribution network. Although leaks can cause significant water loss, few systems have active leak detection programs. A handful of systems participate in the “Water: Use It Wisely” education campaign, a national public awareness program originally developed in Phoenix, Arizona. Leak detection and pipe repair or replacement can require a substantial portion of a utility’s

operating budget but usually are cost-effective means of reducing water loss that in turn amounts to lost revenue. Similarly, an aggressive meter replacement program that aims to replace all meters within five to seven years might be an expensive but cost-effective means of reducing unaccounted for water and revenue losses.

Due to the CCPCUA rules, Pinetops was required to cut back 10% of its withdrawals between 2002 and 2008. Pinetops was able to achieve, and exceed, these cutbacks solely by reducing water losses through an aggressive program of leak detection and pipe replacement as well as meter replacement. Pinetops expects to be able to meet its next 10% cutback requirement by 2013 through the same method. Pinetops increased its water rates in the past few years to fund the capital costs required for pipe and meter replacement but at the same time avoided having to find expensive new sources of water.